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Restoration Contractor ERC Team

Interoffice Memorandum

Job No. 22192
Written Response Required? NO
Closes CCN: N/A
OU: 200-ZP-1
TSD: N/A
ERA: N/A
Subject Code: 8630

TO:

M. A. Buckmaster, H4-80

J. A. Lerch, B1-35

DATE: T

February 15, 1997

COPIES:

See Below

FROM:

R. T. Coffman

Onsite Measurement Services

H9-11/372-9373

SUBJECT:

200-ZP-1 PHASE II PERFORMANCE MONITORING, GROUNDWATER

RESULTS, JANUARY 1997, REV 0

REFERENCES:

- 1. BHI, 1996, On-Site Measurements Quality Assurance Plan, BHI-00852, REV 0, Bechtel Hanford, Inc., Richland, Washington.
- 2. BHI, 1995, Field Screening Procedures, BHI-EE-05, Bechtel Hanford, Inc., Richland, Washington.
- 3. BHI, 1995, 200-ZP-1 Field Screening Support Logbook, EL-1273, Bechtel Hanford, Inc., Richland, Washington.

This data package contains field screening results for groundwater samples analyzed to support 200-ZP-1 IRM Phase II performance monitoring. The Quality Assurance level for this work corresponds to QA-1 as specified in the reference 1 (BHI 1996). Samples collected and analyzed during January 1997 were managed under SAF C97-014 and C97-015. As of January 1, 1997, groundwater sampling responsibilities and oversight was transferred from the ERC, to PNNL, with Rust Federal Services performing the sample collection.

Attachment 1 contains Volatile Organic Compound (VOC) results for groundwater samples collected to support the referenced project. The VOC results were generated using a Hewlett Packard 5890 gas chromatograph with a headspace autosampler operated in accordance with Field Screening Procedure (FSP) 1.1, Aqueous Headspace Analysis of Volatile Organic Compounds in Water (BHI 1995). Information concerning operation and calibration of the gas chromatograph is contained in the instrument logbook EL-1329. Please contact me if you have any questions on this information.

R. T. Coffman, Engineer/Analyst

RTC:rtc



M. A. Buckmaster, H4-80 Page 2

Attachments:

Attachment 1. 200-ZP-1 IRM Phase II Performance Monitoring, Groundwater Results, January 1997

Attachment 2. Sample Chain of Custody Sheets

Copies:

- J. R. Freeman-Pollard, H9-12, w/attachment 1 only
- B. H. Ford, H0-02, w/attachment 1 only
- I. D. Jacques, H9-10, w/attachment 1 only
- R. B. Kerkow, H9-10, w/attchment 1 only
- A. M. Hopkins, H9-11, w/attachment 1 only
- S. A. Strope, T7-12, w/attachment 1 only
- L. C. Swanson, H9-11, w/attachment 1 only
- BHI Document Control, H4-79, w/original attachments

200-ZP-1 Phase II Performance Monitoring Groundwater Results, January 1997 SAF C97-014 and C97-015

Sample Location	HEIS Number	Sample Date	Analysis Date	Chloroform (µg/L)	Carbon Tetrachioride (µg/L)	Trichloroethylene (µg/L)
299-W15-1	BOJRC4	1/29/97	2/5/97	20	3500	12
299-W15-7	BOJRC5	1/28/97	2/5/97	47	3200	18
Duplicate @ 299-W15-7	BOURDO	1/28/97	2/5/97	46	3200	18
299-W15-10	BOJRC6	1/27/97	2/5/97	34	4100	14
299-W15-11	80JRC7	1/27/97	2/5/97	13	740	<2.0
299-W15-26	BOJRC8	1/28/97	2/5/97	70	2700	5,4
299-W15-30	BOJRD6	1/29/97	2/5/97	74	5900	7.4
Duplicate @ 299-W15-30	BOJRD7	1/29/97	2/5/97	79	6500	8.5
299-W15-31A	BOJRD8	1/29/97	2/5/97	57	5100	7.3
299-W15-38	80JRC9	1/28/97	2/5/97	31	2900	<2.0
299-W18-23	BOJRD9	1/29/97	2/5/97	4.5	610	< 2.0
299-W18-26	BOJRFO	1/28/97	2/5/97	16	190	<2.0
699-39-79	BOJRF1	1/28/97	2/5/97	7.5	550	<2.0

J - Value less than practical quantitation limit

VOA Instrument: Hewlett Packard 5890 GC, Serial # 3235A47685 Method: Dual DB-VRX columns, ECD/FiD, 1 mL headspace injection

Logbook: 200-ZP-1 Field Logbook, EL-1273, pgs 132 to 134

Analyst:

P.T. Coffma 2/15/97

R.L. Kerlin 2/18/97

R.B. Kerkow

Pacific Northwest Nation Laboratory	nal	CHA	AIN OF CUSTO	DY/SAM	PLE A	NALYSI	IS REC	QUEST	-		C97-014-	Page	1 of 1
Collector RR FOX (RFS	3		Company Contact J.H. KESSNER		phone No. 09) 372-953:	8		Project Co Stewart,			Data Turnarot Field	ınd	
Project Designation 200-ZP-1 IRM (Group 1) Groun		FY1997	Sampling Location 200-W	<u> </u>			· · · · · ·	SAF No. C97-014			<u> </u>		
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Pacific Northwest Na Laboratory	itional	СНА	AIN OF CUSTO	DY/SAM	IPLE A	NALYS	IS REQ	UEST			C97-014-	7 Page] of]
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Collector RZ STEFFLER	(RFS)		Company Contact J.H. KESSNER	Tele (5	phone No. 09) 372-953	38		Project Co			Data Turnarou Field	nd	<u> </u>
Project Designation 200-ZP-1 IRM (Group 1) Gro	undwater Sampling-F	Y1997	Sampling Location 200-W					SAF No. C97-014					
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Collector RR FOX (F	IFS)		Company Contact J.H. KESSNER		phone No. 09) 372-953	8		Project Co	oordinator DL		Data Turnaro Field	und	
Project Designation 200-ZP-1 IRM (Group 1) Gro	oundwater SamplingFY	′1997	Sampling Location 200-W	 				SAF No. C97-01	4				
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Collector RR FC	OX (RFS)		C	Company Contact J.H. KESSNER		phone No. 09) 372-953	8		Project Co Stewart,			Data Turnarov Field	ind	
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Pacific Northw Laboratory	est National		СНА	IN OF CUSTO	DY/SAM	PLE A	NALYS	IS REQ	UEST			C97-015-2	Page] of]
Collector RF	R FOX (RFS)		C	Company Contact J.H. KESSNER		phone No. 09) 372-953	8		Project Cor Stewart, I		j	Data Turnarot Field	ınd	
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Pacific Northw Laboratory	RR FOX (RFS) relation RM (Group 2) Groundwater Sampling—FY 1997 Shoul 224 oratory AMPLE HAZARDS/REMARKS ling and/or Storage SAMPLE ANALYSIS ple No. Matrix * Samp Water AN S POSSESSION S			CHA	AIN OF CUSTO	DY/SAM	PLE A	NALYS	IS REÇ	UEST			C97-015	-3 Page	1 of 1
Collector R	R FOX (RF	S)			Company Contact J.H. KESSNER		phone No. 09) 372-953	8		Project Co Stewart,			Data Turnaro Field	und	
Project Designation 200-ZP-1 IRM (G	roup 2) Grou	andwater San	npling-FY19	97	Sampling Location 200-W					SAF No. C97-01:	5	·	·		
Ice Chest No.	Sml	274			Field Lozbook No. EFL - 1/1	1-6	PAGES	65	-64		Shipment (aCV)	Urhic	/e		
Shipped To Mobile Laboratory					Offsite Property No.	_				Bill of Lad	ing/Air Bill l	₹o.			
POSSIBLE SAMPL	LE HAZARI)S/REMAR	Ks		Preservation	HCI to pH <2 Cooled to 4C									
					Type of Container	Gs*									
[No. of Container(s)	1									
Special Handling an	nd/or Storag	, e			Volume	40ml									
						VOA BY FIELD GC ~ Chloronated Hydrocarbon									
Sample No	Э.	Matri	x •	Sample Date	Sample Time										
BOJRD8		Wat	er	AN 2 9 19	97 (15)	V									
						<u> </u>							<u> </u>		3
CHAIN OF POSS		····		Sign/Print N				INSTRUCT) s -	Soil Sediment
Relinquished By RR POX (RFS) Relinquished By	T	Date/Ti	ime /300 19-93 ime	Received By Received By	Date Ti	me / 300 2 <i>9-97</i> me								SL - W - O - A -	Solid Shudge Water Oil Air
Relinquished By	 	Date/Ti	une	Received By	Date∕Tis	me								DL -	Drum Solids Drum Liquids Tissue Wipe
Relinquished By		Date/Ti	me	Received By	Date/Tis	me]							L -	Liquid Vegetation Other
LABORATORY SECTION	Received By			<u>.i. —</u> ,		Title	1						Date/Tir	ne	
FINAL SAMPLE DISPOSITION	Disposal Me	thod						Disposed E	Ву		<u> </u>		Date/Tu	ne	

Pacific Northwest Nation Laboratory	ai	CHA	AIN OF CUSTO	DY/SAM	PLE A	NALYS	IS REQI	UEST			C97-014-6	Page	1 of 1
Collector RR FOX (RF:	S)		Company Contact J.H. KESSNER		phone No. 09) 372-953:	8	·	Prolect Co Stewart,			Deta Turnarou Field	nd	<u> </u>
Project Designation 200-ZP-1 IRM (Group 1) Groun	dwater SamplingF	Y1997	Sampling Location 200-W			,		SAF No. C97-014					
Ice Chest No.	·4 276		Field Logbook No.	4-1111-	6	PAUES	63-4	Method of	Shipment	Vahic	14		
Shipped To Mobile Laboratory			Offsite Property No.	~/4				Bill of Lad	ing/Air Bill i	Vo. ~/A			
POSSIBLE SAMPLE HAZARD	S/REMARKS		Preservation	HCl to pH <2 Cooled to 4C									
			Type of Container	Gs*									
			No. of Container(s)	1		<u></u>							<u> </u>
Special Handling and/or Storage			Volume	40ml	<u> </u>								
	SAMPLE A	NAŁYSIS		VOA BY FIELD GC - Chloronated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time			1			1				
BOJRC9	Water	JAN 2 8 199	: 1103	<u>ب</u>									
	·		<u> </u>	<u> </u>				<u> </u>	-	<u> </u>		 -	 -
					-								-
	·	<u> </u>			CDECTAL	INSTRUCT	TIONS	<u> </u>	<u> </u>			т ;	Matrix *
CILAIN OF POSSESSION		Sign/Print N	iames			TIVITY EXE						s .	Soil Sediment
Relinquished By	Date/Time /3*	Received By	Date/Ti - DT COFFMAIJ Date/Ti	ime /300 1-25-97]							SO SL	Solid Studge Water
Relinquished By	Date/Time	Received By	Date/Ti	me]							2	Ol Air
Relinquished By	Date/Time	Received By	Date/Ti	me								DL -	 Drum Solids Drum Liquids Tissue Wipe
Relinquished By	Date/Time	Received By	Date/Ti	me	i t							L -	Liquid Vegetation Other
LABORATORY Received By SECTION				Title	1				<u></u>	_	Date/Time	<u></u>	<u> </u>
FINAL SAMPLE Disposal Meth	od					Disposed B	ву				Date/Time	•	-

Laboratory	.Ontat	СНА	IN OF CUSTO	DY/SAM	IPLE A	NALYS	IS REQ	UEST			C97-015-4	Page	1 of 1
Collector RF THORNTON ((RFS)	K	Company Contact J.H. KESSNER		phone No. 09) 372-953	8		Project Co Stewart,			Data Turnarou Field	nd	
Project Designation 200-ZP-1 IRM (Group 2) Gro		1997	sampling Location 200-W					SAF No. C97-015					
Sinc in	25 RT 1.2			·///Z ·	۶			Method of	Shipment Cour	UE	1.4		
Shipped To Mobile Laboratory		ľ	Offsite Property No.					Bill of Lad	ing/Air Bill !	Vo.			
POSSIBLE SAMPLE HAZAF	RDS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C	[T	 	1	 -	
			Type of Container	Gs*									
			No. of Container(s)	1		<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>		
Special Handling and/or Stora	ge		Volume	40ml									
	SAMPLE AN	ALYSIS	_	VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matrix •	Sample Date	Sample Time										
80JRD9	Water	2-29-57	10912/	X									
	<u> </u>			<u> </u>		-	 						<u> </u>
				 		 	 		 	 -	1		
						<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	 		
CHAIN OF POSSESSION	7	Sign/Print-S	X 1	<u></u>		INSTRUCT TIVITY EXE		1	1	!	<u></u>	s .	Atrix * Sod Sudiment
Relinquished By RF THORN (PCS)	Date/Time 17,2	P.R. FOL	1-29	me 1326 -97								SO - SL -	Solid Shudge Weter
Relinquished By R.R.F.* Relinquished By	Date/Time 134* 1-29-63 Date/Time	Received By Received By Received By	Date/Ti	me 1348 7-97								A =	Oil Air Drum Solids Drum Litvids
Relinquished By	Date/Time	Received By	Date/Ti									WI -	Tissue Wipe Liquid Vegetation Other
LABORATORY Received By SECTION		1		Title	<u> </u>				<u> </u>		Date/Tim		
FINAL SAMPLE Disposal M DISPOSITION	fethod	···	·			Disposed B	y				Date/Tim	e	

Pacific Northwest Nati Laboratory	ional	СНА	HAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST								C97-015-	Page	1 of 1	
Collector RZ STEFFLE	C	Company Contact Telephone No. J.H. KESSNER (509) 372-9538					Project C Stewart	oordinator DL		Data Turnaround Field				
Project Designation 200-ZP-1 IRM (Group 2) Groundwater SamplingFY 1997			Sampling Location 200-W					SAF No. C97-015						
Ice Chest No. 5mL - 545			Field Logbook No. WHC-N-205 #63					Method of Shipment						
Shipped To Mobile Laboratory		Offsite Property No.					Bill of Lading/Air Bill No.							
POSSIBLE SAMPLE HAZARDS/REMARKS			Preservation	HCl to pH <2 Cooled to 4C		1			T	1			<u> </u>	
		-	Type of Container	Gs*			1		 				<u> </u>	
			No. of Container(s)	1										
Special Handling and/or Storage			Volume	40ml					1				1	
	SAMPLE A	NALYSIS		VOA BY FIELD GC – Chloronated Hydrocarbon										
Sample No.	Matrix •	Sample Date	Sample Time							1				
BOJRFO	Water	JAN 28 199	1030	X										
							-							
					<u> </u>								<u> </u>	
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		1	1	<u> </u>	CRECTAL	Dierbiie	FIGNIC			<u> </u>	<u> </u>	1 57	atrix •	
CHAIN OF POSSESSION Sign/Print Names					SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT							s -	Soil	
Relinquished By	Date/Ti								SO ~	Sediment Solid Studge Water				
Relinquished By	/-28-97	Received By	Date/Ti	ne]							2 -	Oil Air	
Relinquished By	Date/Time	Received By	Date/Tir	ne	1							DL -	Drum Solids Drum Liquids Tissue	
Relinquished By	Date/Time	Received By	Date/Tiz	ne								r -	Wipe Liquid Vegetation Other	
LABORATORY Received By SECTION	,			Title	<u> </u>					<u> </u>	Date/Tim	<u> </u>		
FINAL SAMPLE Disposal N DISPOSITION						Disposed By					Date/Time			
														

Pacific Northwest Natio	onal	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST									C97-015-	6 Page	1 of 1	
Collector RZ St	Afler CRA	s)	Company Contact Telephone No. J.H. KESSNER (509) 372-9538					Prolect Coordinator Stewart, DL			Data Turnaround Field			
Project Designation 200-ZP-1 IRM (Group 2) Groundwater Sampling-FY1997 Ice Chest No. SNL - 5/5			Sampling Location 200-W Field Logbook No. WHC - IV-205 # 63 Offsite Property No. IVA					SAF No. C97-015						
								Method of Shipment Hund Carried						
Shipped To Mobile Laboratory	Bill of Lading/Air Bill No.													
Possible sample hazards/remarks			Preservation	HCl to pH <2 Cooled to 4C		<u> </u>								
			Type of Container	Gs*							,			
			No. of Container(s)	1										
Special Handling and/or Storage			Volume	40ml										
	SAMPLE AI	NALYSIS		VOA BY FIELD GC — Chloronated Hydrocarbon										
Sample No.	Matrix *	Sample Date	Sample Time											
B0JRF1	Water	1-28-97	1111	X										
						<u> </u>			<u> </u>					
	<u> </u>				<u> </u>	<u> </u>				<u> </u>				
		ļ	_			<u> </u>								
				<u> </u>		<u> </u>	ļ							
					CDECTAL	DISTRICT	IONE		<u> </u>	<u> </u>		 ;	Astrix *	
CHAIN OF POSSESSION Sign/Print Names					SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT							s -	Soil	
Relinquished By RZ STEFFLER (RFS) Relinquished By	Date/Time	Received By RTCoffee	Date/Ti _ PTCOFFMAN /	me 28-97 1245								Sr -	Sediment Solid Studge Water	
Relinquished By	Date/Time	Received By	Date/Ti	ime								\	Oil Air Drum Solids	
Relinquished By	Date/Time	Received By	Date/Ti	ime								DL -	Drum Liquids Tissue	
Relinquished By	Date/Time	Received By	Date/Ti	ime	1							V -	Wipe Liquid Vegetation Other	
LABORATORY Received By SECTION				Tide	I					<u></u>	Date/Tim		•	
FINAL SAMPLE Disposal Me DISPOSITION	ethod	Disposed By						Date/Time						
	 	·												